

Original Research Article

Addressing the debate of menstrual leave-understanding the relationship between attitude towards menstruation and perception towards menstrual leave among undergraduates in a medical college in Kerala

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ABSTRACT

Background: The debate on menstrual leaves has evolved into a polarizing discourse. It critiques gender equity, workplace politics and the position of women in academic and professional spaces. It also interweaves the religious, social and political norms surrounding menstruation. This study addresses the views on menstruation and menstrual leaves among female medical undergraduates whose attitudes strike a balance between their sound medical knowledge and the prevailing societal norms.

Methods: This cross-sectional study was conducted using the 4th edition protocol of Menstrual Attitude Questionnaire (MAQ) and items assessing awareness, utilization and support for menstrual leave. Descriptive statistics were used to summarize variables and analysis between variables was done using the chi-square test.

Results: 54.5% of female students perceived menstruation to be a debilitating event, 43.2% agreed menstruation to be a bothersome event and 66.45% perceived menstruation as a natural event. Although 51.4% of females reported having not taken leave during menstruation, a substantial majority (89.1%) believed women should be entitled to menstrual leaves. The debilitating and bothersome aspects of menstruation contributed to women taking leave during menstruation, with the debilitating nature of menstruation being associated with supporting the provision of menstrual leaves. There was a positive association between having taken leave during menstruation and supporting the provision of menstrual leaves.

Conclusions: The findings indicate that perception of menstruation as debilitating and bothersome event strongly influence the support for the provision of menstrual leaves. This advocates the need for policies that are both evidence based and empathetic.

Keywords: Attitudes, Menstruation, Menstrual leave, Women

INTRODUCTION

Womanhood possesses an inherent dignity of its own. Assuming many roles and tackling a range of challenges, from biological to societal, is remarkable.¹ According to WHO, every month nearly 1.8 billion people menstruate.² Yet, even in the 21st century menstruation is entangled

with fear, isolation, misconceptions and discrimination. Most women experience symptoms in the milder end of the spectrum; while for some it is often unbearable and affects their day-to-day activities. Spectrum symptoms include mood swings, fatigue, abdominal cramps, back and body aches and heavy bleeding.³ Adding insult to injury is the stigma that pervades every aspect of life

when it comes to menstruation. Menstrual stigma encompasses the unfavorable views of menstruation and menstruators, often portraying the menstruating body as undignified.⁴ A recent study that cataloged 93 types of stigmas did not even include menstrual stigma among them.⁵

Recent policy amendments aim to challenge and declutter these negative perceptions. In India, policymakers have recently introduced the right of women to menstrual leave and free access to menstrual health products Bill, 2022, which is an encouraging step for all working women force in the country.⁶ The Kerala Government's new initiative for providing menstrual leave in higher education institutions is also noteworthy. These policies bring attention to the often unnoticed and discrete aspects of menstruation.

But such huge strides do not confront the menstrual stigma. Destigmatisation is a long, drawn-out, exhausting process. Despite efforts to address menstrual awareness, hygiene and period poverty, there is paucity of research in India when it comes to assessing the attitude towards menstruation. The disparity between Kerala's comprehensive educational progress and the enduring menstrual taboos renders it an optimal setting for analyzing the intersection of menstrual attitudes.

Attitude towards menstruation is influenced by one's understanding intertwined with sociocultural norms.⁸ The positive and negative attitudes towards menstruation lays the groundwork for implementation of menstrual leave policies and predicting their effectiveness.⁷ Despite medical undergraduates' comprehensive knowledge of menstruation's intricacies, addressing their attitude towards it is an overlooked endeavor.

Thus, this study intended to assess the attitude of female medical undergraduates towards menstruation, providing evidence to contribute to the debate on menstrual leave policies. Understanding these attitudes is relevant for shaping inclusive and effective policies that cater to the diverse needs.

METHODS

A cross-sectional study was done at Govt. Medical College, Thiruvananthapuram from January 2025 to April 2025. The minimum sample size was calculated using Cochran's formula for a cross-sectional study, assuming a prevalence of 35.3% and a relative precision of 20% at 95% confidence level, which yielded a minimum sample size of 176.

Accounting for an anticipated non-response rate of 50%, commonly observed in online surveys among medical students,⁹ the minimum number of invitations required was estimated as 352. For the benefit of the study and to ensure broad representation, the questionnaire was sent to all female undergraduate medical students enrolled at

Government Medical College, Thiruvananthapuram. Those who did not consent to the study or provided incomplete data were excluded from the study. Data collection was done using a validated, pre-tested questionnaire designed using Kobo tool box. The questionnaire was self-administered in English language. The duration for filling in the questionnaire was approximately 10 minutes. Any doubts were clarified by the principal investigator. The questionnaire administration was done in a closed room ensuring privacy. The questionnaire comprised of 2 components. The first component consisted of participant information sheet (PIS) explaining about the study, risks and benefits in detail.

Prior to proceeding to the second component, informed consent was obtained. The initial part of the questionnaire (MAQ) consisted of socio-demographic details including 4 items- age, year of study, place of permanent residence, socioeconomic status (using modified Kuppaswamy's scale 2021). The second part of the questionnaire assessed attitude towards menstruation using 4th edition protocol of menstrual attitude questionnaire. 4th edition protocol of menstrual attitude questionnaire contains 15 items addressing 3 distinct attitudinal dimensions: menstruation as a debilitating event, as bothersome or natural event (reversal item).¹⁰

Responses were scored using a five-point likert scale (strongly disagree=1 to strongly agree=5). The study commenced after obtaining clearance from the Institutional Ethics Committee (HEC No.:02/22/2025/MCT). All the ethical principles were followed in the study. The participants were assured of autonomy and confidentiality. They were given the right to withdraw from the study at any point if they felt uncomfortable. The full version of the questionnaire was obtained from the authors and had sought permission to use this questionnaire for this study.

Data was entered into Microsoft Excel sheet and analyzed using SPSS (statistical product and service solution) IBM statistics, Chicago version 25. All Quantitative variables were expressed in terms of mean and standard deviation. Qualitative variables were expressed in proportions. Chi-square test was used to determine the association between different perceptions of menstruation and leave during menstruation.

RESULTS

The invitation along with the questionnaire was sent to 725 medical female undergraduate students. A total of 350 female undergraduates responded to all questions and were included in the final analysis. The participants' age ranged from 17 to 27 years with a mean age of 21.29 ± 1.517 years. Of the total sample, 49.7% were from urban areas while 50.3% were from rural areas. Most of the participants belonged to upper middle- and upper-class families as shown in Figure 1.

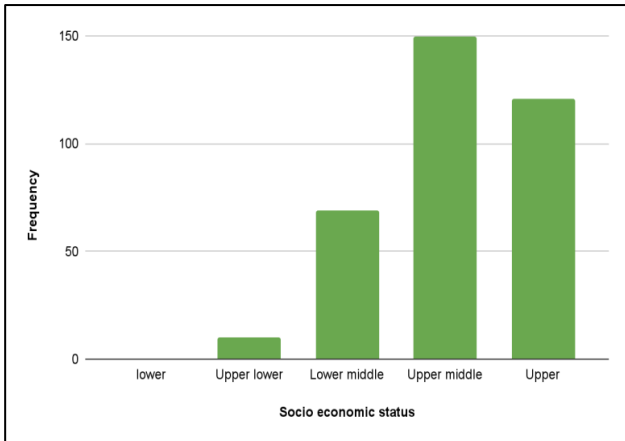


Figure 1: Socioeconomic status of participants.

The distribution of attitude towards menstruation revealed 54.5% believed menstruation to be a debilitating event, 43.2% believed menstruation to be a Bothersome event and 66.45% believed it to be a natural event. The proportion of participants who took leave during menstruation was found to be 48.6%. 89.1% believed menstruators should be entitled to menstrual leave. 60.6% were found to be aware of menstrual leave. Table 1 and 2 depicts that menstruation as a debilitating and bothersome event and is associated with having taken leave during menstruation. Support for menstrual leave policies is strongly associated with perceptions of the debilitating nature of menstruation as shown in Table 3. There is strong association between having taken leave during menstruation and supporting the provision of menstrual leaves as given in Table 4.

Table 1: Association between perceiving menstruation as a debilitating event and taking leave during menstruation.

Variables		Have taken leave during menstruation			P value	Odds ratio	95% confidence interval of odds ratio	
		Yes	No	Total			Lower	Upper
Feel more tired than usual	Yes	147 (86.5%)	124 (68.9%)	271 (77.4%)	<0.001	0.346	0.202	0.595
	No	23 (13.5%)	56 (31.1%)	79 (22.6%)				
	Total	170	180	350 (100%)				
Expect extra consideration	Yes	105 (61.8%)	68 (37.8%)	173 (49.4%)	<0.001	0.376	0.244	0.579
	No	65 (38.2%)	112 (62.2%)	177 (50.6%)				
	Total	170	180	350 (100%)				
Changes in physical condition during menstruation are greater	Yes	129 (75.9%)	124 (68.9%)	253 (72.3%)	0.144	0.704	0.439	1.129
	No	41 (24.1%)	56 (31.1%)	97 (27.7%)				
	Total	170	180	350 (100%)				
Think unhealthier	Yes	103 (60.6%)	72 (40%)	175 (50%)	<0.001	0.434	0.283	0.666
	No	67 (39.4%)	108 (60%)	175 (50%)				
	Total	170	180	350 (100%)				
Cannot do usual behaviors	Yes	75 (44.1%)	44 (24.4%)	119 (34%)	<0.001	0.410	0.260	0.646
	No	95 (55.9%)	136 (75.6%)	231 (66%)				
	Total	170	180	350 (100%)				
Better to avoid certain behaviors	Yes	77 (45.3%)	72 (40%)	149 (42.6%)	0.317	0.805	0.527	1.231
	No	93 (54.7%)	108 (60%)	201 (57.4%)				
	Total	170	180	350 (100%)				
Easy not to feel well than usual before menstruation	Yes	108 (63.5%)	88 (48.9%)	196 (56%)	0.006	0.549	0.358	0.842
	No	62 (36.5%)	92 (51.1%)	154 (44%)				
	Total	170	180	350 (100%)				

Table 2: Association between perceiving menstruation as a bothersome event and taking leave during menstruation.

Variables		Have taken leave during menstruation		Total	P value	Odds ratio	95% confidence interval of odds ratio	
		Yes	No				Lower	Upper
Something to put up with	Yes	84 (49.4%)	70 (38.9%)	154 (44%)	0.047	0.652	0.426	0.996
	No	86 (50.6%)	110 (61.1%)	196 (56%)				
	Total	170	180	350 (100%)				
Cannot feel good during menstruation	Yes	81 (47.6%)	52 (28.9%)	133 (38%)	<0.001	0.446	0.287	0.694
	No	89 (52.4%)	128 (71.1%)	217 (62%)				

Continued.

Variables		Have taken leave during menstruation		Total	P value	Odds ratio	95% confidence interval of odds ratio	
		Yes	No				Lower	Upper
		170	180	350 (100%)				
Men have adv in not having menstruation	Yes	120 (70.6%)	103 (57.2%)	223 (63.7%)	0.009	0.557	0.358	0.868
	No	50 (29.4%)	77 (42.8%)	127 (36.3%)				
		170	180	350 (100%)				
Hope to get shorter menstrual periods	Yes	80 (47.1%)	62 (34.6%)	142 (40.7%)	0.018	0.596	0.388	0.917
	No	90 (52.9%)	117 (65.4%)	207 (59.3%)				
		170	180	350 (100%)				
Only good thing is to let know one is not pregnant	Yes	61 (35.9%)	47 (26.1%)	108 (30.9%)	0.048	0.631	0.400	0.997
	No	109 (64.1%)	133 (73.9%)	242 (69.1%)				
		170	180	350 (100%)				

Table 3: Association between perceiving menstruation as a debilitating event and supporting the provision for menstrual leaves.

Variables		Do you think women should have menstrual leave		Total	P value	Odds ratio	95% confidence interval of odds ratio	
		Yes	No				Lower	Upper
Feel more tired than usual	Yes	252 (80.8%)	19 (50%)	271 (77.4%)	<0.001	0.238	0.119	0.477
	No	60 (19.2%)	19 (50%)	79 (22.6%)				
		312	38	350				
Expect extra consideration	Yes	161 (51.6%)	12 (31.6%)	173 (49.4%)	0.020	0.433	0.211	0.889
	No	151 (48.4%)	26 (68.4%)	177 (50.6%)				
		312	38	350 (100%)				
Changes in physical condition during menstruation are greater	Yes	233 (74.7%)	20 (52.6%)	253 (72.3%)	0.004	0.377	0.190	0.748
	No	79 (25.3%)	18 (47.4%)	97 (27.7%)				
		312	38	350 (100%)				
Think unhealthier	Yes	163 (52.2%)	12 (31.6%)	175 (50%)	0.016	0.422	0.206	0.866
	No	149 (47.8%)	26 (68.4%)	175 (50%)				
		312	38	350 (100%)				
Cannot do usual behaviors	Yes	111 (35.6%)	8 (21.1%)	119 (34%)	0.074	0.483	0.214	1.089
	No	201 (64.4%)	30 (78.9%)	231 (66%)				
		312	38	350 (100%)				
Better to avoid certain behaviors	Yes	133 (42.6%)	16 (42.1%)	149 (42.6)	0.951	0.979	0.495	0.936
	No	179 (57.4%)	22 (57.9%)	201 (57.4%)				
		312	38	350 (100%)				
Easy not to feel well than usual before menstruation	Yes	182 (58.3%)	14 (36.8%)	196 (56%)	0.012	0.417	0.208	0.836
	No	130 (41.7%)	24 (63.2%)	154 (44%)				
		350 (100%)						

Table 4: Association between having taken leave during menstruation and supporting its provision.

		Do you think women should have menstrual leave			Chi-square value	P value	Odds ratio	95% confidence interval of Odds ratio	
		Yes	No	Total				Lower	Upper
Have you taken menstrual leave	Yes	162 (51.9%)	8 (21.1%)	170 (48.6%)	12.923	<0.001	4.050	1.800	9.112
	No	150 (48.1%)	30 (78.9%)	180 (51.4%)					
				350 (100%)					

DISCUSSION

The study addresses young women's attitudes towards menstruation, awareness and perception towards menstrual leaves, revealing attitudinal ambivalence and a strong awareness and support for menstrual leaves.

Attitude towards menstruation

The study highlighted the various domains of attitude towards menstruation among medical undergraduates and their perception of menstrual leave. While a majority recognized menstruation to be a natural event, a substantial proportion of undergraduates also perceived menstruation to be debilitating and bothersome. These mixed perceptions reflect the duality of menstruation, being a natural physiological phenomenon on one hand and a major source of significant physical and emotional burden for many on the other. It supports the notion of menstruation as a multidimensional phenomenon.¹¹ Attitudinal ambivalence refers to the simultaneous presence of both positive and negative attitudes towards menstruation. It could be due to conflict between traditional beliefs, conduct or convictions.¹² These findings are consistent with a large-scale meta-analysis involving over 21,000 young women revealing that 90% reported experiencing debilitating menstrual pain and 40% reported missing academic or professional obligations due to these symptoms.¹³

The positive attitude towards menstruation was also found to be higher. It highlights the importance of educational background. In multiple researches, medical students were found to have a positive attitude towards menstruation compared to their non-medical counterparts. This could be due to their enhanced knowledge on the physiology of menstruation and its impact on the quality of life.^{9,13}

Menstrual leave policies

Despite nearly half of the responders having not taken leave during menstruation, an overwhelming majority believe women should be entitled to menstrual leave. This is in line with research done in Tamil Nadu where respondents strongly supported having menstrual leaves

to address their health needs (82.3%) and manage dysmenorrhea (75.8%).¹⁴ The study found that perceiving menstruation as debilitating and bothersome was significantly associated with taking leave during menstruation. This suggests that individuals who experience menstrual symptoms at the disruptive end are likely to take leave as a necessary coping mechanism. Thus, severity of symptoms and negative attitudes are key predictors of menstruation related absenteeism.¹⁵

Awareness on menstrual leave policies

It is encouraging to find that a good majority of students are aware of menstrual leave policies. Awareness is the critical first step in addressing menstrual leave policy debates as it aids in dismantling stigma, foster gender equality and improve health and legal literacy.^{16,17}

Factors influencing support for menstrual leave policies

It was found that the support for menstrual leave policies was strongly associated with the perception of menstruation as debilitating. This underscores the physical and emotional burden that tag along with menstruation which likely drives the endorsement of such policies. But the debilitating aspect of menstruation would result in medicalization of menstruation, a physiological phenomenon.¹⁸ Given that dysmenorrhea reduces quality of life related to health and performance, it may be viewed as both a social and health issue.¹⁹ One must also consider menstrual disorders like Polycystic ovarian disease (PCOS), Premenstrual dysphoric disorder (severe PMS), endometriosis that can cause significant functional impairment. Hence one needs to strike a balance between the two conflicting notions.

Additionally, there was a strong association between having taken leave during menstruation and endorsing the provision of menstrual leave. This highlights the personal experiences of the participants that may influence broader shifts in supporting the provision of menstrual leave. The discourse on menstrual leave is nuanced and necessitates a meticulous balance of health, rights and sociocultural norms. Hence, addressing the attitudes on menstruation and perception towards menstrual leaves would be a step in normalizing discussions on it. It creates an

environment conducive to menstruation and menstruators. Ultimately ensure their well-being is prioritized and not stigmatized and enables women to menstruate with dignity.

Strength

The study was conducted among female medical undergraduates of a medical college in Kerala. Kerala is a state with high literacy rate and medical undergraduates are well versed on the knowledge of menstruation and menstrual hygiene. Hence, attitude towards menstruation remains an unchecked domain of menstruation necessary for combating stigma. Kerala Government had also recently passed a menstrual leave policy for higher educational institutions. Hence this study also addresses one's awareness towards the newer reforms and their perception towards it.

Limitation

As this is a Self-administered data collection tool, social desirability bias might have crept in given the sensitive nature of menstruation related topics. This study was limited to a single institution and was done among medical undergraduates who were well versed on the knowledge of menstruation. For broader policy reforms and to enhance generalizability, more studies involving diverse societal groups in different regions are required.

CONCLUSION

The study showed that medical students' attitude towards menstruation was multidimensional and ambivalent despite their well-versed knowledge on menstruation. The study highlights that a substantial proportion of female medical undergraduates perceived menstruation as a debilitating event and nearly half reported taking leave during menstruation. Although some of the study participants had not availed menstrual leave and had differing attitudes towards menstruation, an overwhelming proportion supported the entitlement to menstrual leave. Perceiving menstruation as debilitating and bothersome was significantly associated with having taken leave during menstruation and the debilitating perception showed a strong association with support for menstrual leave provision. Awareness regarding menstrual leave was present among more than half of the participants. Additionally, having previously taken leave during menstruation was strongly associated with endorsing menstrual leave policies. These findings highlight a clear relationship between menstrual attitudes, personal experience of menstruation-related impairment and support for menstrual leave among female medical undergraduates.

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